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TWEET THE NEWS: SOCIAL MEDIA STREAMS AND THE PRACTICE OF JOURNALISM

Alfred Hermida

The first signs that a major news story was about to break on May 1, 2011, came in a terse message on Twitter from the communications director at the White House, Dan Pfeiffer. "POTUS to address the nation tonight at 10:30 p.m. Eastern Time," said the tweet sent at 9.45 EST, referring to a surprise appearance by President Barack Obama. Less than an hour later came the first credible report on what the president was set to announce: the death of Osama Bin Laden.

The news did not come from a news agency or a 24/7 news channel, but on Twitter in the form of a message sent at 10:25 EST by Keith Urbahn, the chief of staff for the former defense secretary Donald Rumsfeld: "So I'm told by a reputable person they have killed Osama Bin Laden. Hot damn." (Urbahn, 2011). The tweet reverberated

@keithurbahn
Keith Urbahn

So I'm told by a reputable person they have killed Osama Bin Laden. Hot damn.

1 May via Twitter for BlackBerry®   ☆ Favorite ⇄ Retweet ↩ Reply

across social media, triggering a flood of reactions and discussions on Twitter. Just over an hour later, at 11.35 EST, a sombre President Obama confirmed that US special forces had killed Bin Laden in Abbottabad, a Pakistani city about two hours from the capital Islamabad. The flow of messages on Twitter reached fever pitch, with the company recording more than 4,000 tweets per second as the president spoke (Twitter Comms, 2011). Among the messages were those of Pakistani IT consultant Sohaib Athar, who unwittingly live-tweeted the US raid on Bin Laden's compound (Butcher, 2011).

The death of Bin Laden led one commentator to say that Twitter had experienced its "CNN moment" (Rosof, 2011), a reference to how the 24-hour news channel broke through into the mainstream during the first Gulf War with its live broadcasts of the aerial bombing raids on Baghdad. But this was far from the first time that Twitter played a significant role in the flow and spread of breaking news.

The social messaging service has been in the media spotlight for its role in coverage of major events such as the earthquake in the Sichuan province of China in May 2008, the terrorist attacks in Mumbai in November 2008 (BBC News, 2008), the crash of a US Airways plane on the Hudson River in January 2009 (Kwak et al., 2010), the protests following the Iranian election in June 2009 (Grossman, 2009) and the uprising in Egypt (Crovitz, 2011). In its brief five-year history, Twitter has developed as the default media network for real-time news, accelerating flows of information, leading one commentator to note that "news no longer breaks, it tweets" (Solis, 2010).

Twitter is one of a range of digital communication tools and services, usually identified by the catch-all phrase of social media, that are transforming the way news is gathered, disseminated and consumed, and influencing the direction and practice of journalism. Social media platforms build on notions of a participatory media culture, where the people formerly known as the audience (Rosen, 2006) can do more than simply read the news. The technologies allow citizens and organisations to take on some communication functions that were previously largely in the hands of media institutions. It has become common for the first reports, photos and video of a breaking news event to come from people caught up in the incident. As a result, the media circulating in the social media has become an integral part of newsgathering by news organisations.

Making sense of Twitter

Twitter has come a long way since its launch in August 2006 by a San Francisco start-up, asking its users the question "What are you doing?", later changed to "What's happening?" Towards the end of 2010, it had a reported 175 million registered users (Cain Miller, 2010). According to its own figures, an average of 140 million messages were being sent daily on the service by March 2011(Penner 2011). Twitter now describes itself as "a real-time information network that connects you to the latest information about what you find interesting" (Twitter, n.d).

The free service brings together aspects of text messaging, blogging and social inter- action. Twitter is usually described as microblogging but it is perhaps more accurate to

refer to it as a social messaging technology that extends our ability to communicate. Users can share short messages of 140 characters or less that are sent out to their followers – people who subscribed to receive the tweets. Since accounts are public by default, the messages can be seen by anyone, regardless of whether or not they have signed up to Twitter.

There is a conversational aspect as users can send a public message directed at another person by using the @username convention. People can also resend a message by someone else to their social circle by retweeting it, generally using the "RT @ username" format to acknowledge the original source. The @username convention is also used when a person is mentioned in a message. Thus, it is easy to see recent messages in which a user was replied to, retweeted or mentioned.

Twitter supports a hash annotation format that allows users to tag a message. The hash sign, #, is used to indicate the topic of a tweet. The hash convention means discussions on issues such as the uprising in Egypt in early 2011 could be tracked using the tag #Jan25, a reference to the day when mass protests started against the then president Hosni Mubarak. Twitter uses an algorithm to identify and rank keywords or hashtags that are immediately popular, creating a list of trending topics. These trending topics reflect what new or newsworthy topics are occupying the most people's attention on Twitter at any one time, exposing the aggregate interests and attention of global and local communities.

Twitter and related social media platforms such as Facebook that allow users to share streams of content, from short status messages to links, photos and videos are social awareness streams (Naaman et al., 2011). Initial research into the content of these streams on Twitter identified four main activities: daily chatter, conversation, sharing information and reporting news (Java et al., 2009). Sharing information and reporting news are directly relevant to journalism, but so too are daily chatter and conversation.

By providing a means for millions to communicate, share and discuss events in real time, Twitter can provide a constantly updated live representation of the lives, interests and opinions of its users. Sankaranarayanan et al. go as far as saying that "Twitter, or most likely a successor of it, is a harbinger of a futuristic technology that is likely to capture and transmit the sum total of all human experiences of the moment" (2009: 51). Of course, the topics range from the trivial to the ridiculous to the momentous. For example, at the time of writing, a trending topic worldwide was a rumor, later confirmed, that actor Ashton Kutcher was replacing Charlie Sheen in the popular TV sitcom *Two and a Half Men*. In contrast, at the same time one of the preoccupations of Twitter users in Vancouver, Canada, was the recent election of the provincial premier Christy Clark.

Twitter and journalism

The streams of data on social media such as Twitter can be described as ambient journalism (Hermida, 2010a; 2010b). Ambient journalism posits that journalism itself has become omnipresent, like the air we breathe, due to the emergence and uptake of

social awareness communication systems. Twitter is part of an ambient media system where users are able to dip in and out of flows of news and information from both established media and from each other.

Social awareness streams create a multifaceted and fragmented news experience, marking a shift away from the classical paradigm of journalism as a framework to provide reports and analyses of events through narratives. The immediacy and velocity of microbursts of data can strain the cognitive abilities of journalists and audiences to spot the important amongst the trivial and obtain a developed picture of events. The problem is exacerbated during breaking news events. For example, during the protests against the Iranian election results in June 2009, the volume of tweets mentioning Iran peaked at 221,774 in one hour, from an average of between 10,000 and 50,000 an hour (Parr, 2009).

The overwhelming nature of the messages on Twitter is one of the most common critiques by journalists. In their analysis of US media coverage of first three years of its existence, Arceneaux and Schmitz Weiss found critics commonly mocked the service for unleashing "a torrent of useless information upon users" (2010: 1271). At other times, the media expressed skepticism about Twitter. Remarks by journalists such as "it's like searching for medical advice in an online world of quacks and cures" (Goodman, 2009) and "Twitter? I won't touch it. It's all garbage" (quoted in Stelter, 2009) reflect the intensity of derision from some in the profession. Even the renowned *New York Times* columnist Maureen Dowd described Twitter as "annoying", suggesting to its founders that they had created "a toy for bored celebrities and high-school girls" (2009).

The negative reactions to Twitter reflect what Arceneaux and Schmitz Weiss call "the contested process of technological adoption in response to new forms of media," (2010: 1263), such as the telegraph, radio and the internet. There are parallels with the initial reaction of journalists to another form of social media, blogs, in the early 2000s when established news outlets regarded them as "amateurish, filled with errors and not credible" (Tremayne, 2007: 261). What makes journalists and others uneasy about technologies such as Twitter is that "they disrupt established concepts of communication, prevailing notions of space and time and the distinction between public and private spheres" (Arceneaux and Schmitz Weiss, 2010: 1265).

Despite some vocal critiques of the social media platform, Arceneaux and Schmitz Weiss conclude that USA media coverage was primarily positive about Twitter, with most stories mentioning at least some benefit. This might go some way towards explaining the rapid adoption of the service by journalists and newsrooms. The number of media professionals signing up prompted the American Journalism Review (AJR) to publish an article in April 2009 entitled "The Twitter Explosion". It pointed out that some well-known media figures had followings that are almost as large as the circulation of their newspapers or viewership of their TV show, but also mused whether Twitter "is more than just the latest info-plaything" (Farhi, 2009).

Since then, the Twitter explosion has reached more journalists and newsrooms. Research in the US found that by 2010 all but one of the top 198 newspapers and TV stations in the US had an official Twitter account (Messner et al., 2011). Some news

organizations have encouraged their staff to sign up for the service, while others have created a new post of social media editor to engage with audiences and teach reporters how to make the most of Twitter (Gleason, 2010).

Every new communication technology, from radio to TV to the internet, has played a role in influencing how journalists think and go about their work. We are still in the early stages of understanding how Twitter and similar real-time social messaging tools are affecting well-established journalistic norms and practices. But there is a growing body of work into how mainstream journalists are figuring out how to integrate what Lasorsa et al. label as "a new media format that directly challenges them" (2011: 1). Twitter is one of a range of technologies that undermine the traditional gatekeeping role of journalists by allowing anyone to gather, publish and distribute news and information to a broad audience. I have previously argued that social media platforms are "creating new forms of journalism, representing one of the ways in which the Internet is influencing journalism practices and, furthermore, changing how journalism itself is defined" (2010a: 4).

Journalists' use of Twitter

When media take up a new communication technology, there is a process of negotiation as newsrooms incorporate novel tools and techniques into time-honored ways of working. Journalists have tended to transfer their organizational norms to digital media rather than rethink established routines and conventions. There is an emergent body of literature into what journalists are doing on social media platforms, and how these new practices are interacting with journalistic conventions.

Initial research suggests that journalists are extending existing practices to social media. There are four main ways that journalists have been using Twitter: to report the news, to drive traffic to websites, to gather the news and to find sources. The ability to send short bursts of information in real time has been embraced by journalists as a way to post snippets of news and to share and send links to their material. As Farhi (2009) notes, "reporters now routinely tweet from all kinds of events – speeches, meetings and conferences, sports events." Twitter has even become a factor in court reporting, with tweets from the courtroom offering virtually contemporaneous accounts of proceedings. One particularly notable case was the trial in Canada of convicted murderer Colonel Russell Williams, where the graphic nature of the evidence led to questions about the appropriateness of Twitter as a reporting tool (Zerbisias, 2010). Similar questions were raised in 2008, when a US reporter provided real-time updates from the funeral of a three-year-old boy, prompting a wave of criticism (Degette, 2008).

News outlets have tapped into the ability to reach a broader audience by incorporating social media platforms as distribution networks for stories. Both news organisations and individual journalists have used Twitter to promote their work and build the online audience. In their analysis of the official Twitter accounts of the top newspaper and TV organisations in the US, Messner et al. (2011) found that most tweets were links back to their websites. In effect, Twitter was being used as an alternative to an automated RSS feed of the latest news stories. One study found that

many newsrooms automatically generated a tweet with a link anytime a story was published on their website, (Blasingame, 2011). "The use of the news organisation's official Twitter channels has not yet developed beyond the utilization as a promotional tool to drive traffic to websites," suggest Messner et al. (2011: 20). A study of the use of Twitter by regional news outlets in Portugal reached similar conclusions (Jeronimo and Duarte, 2010). As for individual journalists, an analysis of the tweeting habits of US journalists by Lasorsa et al. (2011) found that 42 percent of the tweets contained an external link, with half of these to the journalist's own host news organisation.

There are mixed indications as to the effectiveness of Twitter as a platform for journalists and newsrooms to promote their work. Following an analysis of 80 US media sources on Twitter in 2009, An et al. (2011) suggested that social links increase the reach of a news organisation, particularly for those with smaller audiences. However, a study by the Project for Excellence in Journalism found that Twitter accounted for a small percentage of the total traffic sent to the top news sites in the US, especially when compared to visitors coming via Google or to the news sites directly (Olmstead et al., 2011). Links to news stories posted on Twitter.com made up just over 1 percent of traffic to top news sites such as the *New York Times*, *New York Post* and the *Huffington Post*.

But news organisations do see value in extending their newsgathering operations to Twitter and related social media platforms. Time and again, Twitter has demonstrated its potential as a platform for eyewitness reports of events as they unfold in real-time.

For example, one of the first reports from Haiti when the devastating earthquake struck in January 2010 came in a tweet from Frederic Dupoux just seven minutes after the tremor, followed by dozens more (Bruno, 2011). "Once again social media took charge of 'breaking the news' to the world about a major crisis event," wrote Bruno (2011: 13).

At the time of the quake, the only two foreign correspondents on Haiti were an Associated Press reporter and a Reuters local stringer. While news outlets rushed to get their correspondents to Haiti, many newsrooms turned to Twitter, Flickr and YouTube for first-hand reports from witnesses on the ground. A senior TV news editor in the UK, Ed Fraser, remarked that "for the first time really, certainly in online terms but also for broadcast, Twitter was one of those vehicles which had a life of its own. It gave us real time information as to what was going on on the ground" (quoted in Bruno, 2011). In these types of situations, Twitter users take on the role of social sensors of the news (Sakaki et al., 2010). The network functions as a detection system that can provide early warning of breaking news, and then provide a stream of real-time data as events unfold.

By extension, journalists have turned to social media platforms to find and develop a range of sources and contacts. A reporter can chose to follow specific people relevant to their beat or create lists of users, based on topic or location. *We the Media* author Dan Gillmor recommends that journalists "follow people who point them to things they should know about" (quoted in Farhi 2009). Twitter enables journalists to create a personalized news wire, with potential thousands of sources relevant to the focus of their professional work. A survey of nearly 500 journalists across 12 countries found

that nearly half of respondents said they used Twitter to source new story angles, compared to 35 percent who used Facebook (Oriella PR Network, 2011). Now, in journalism classes, students are being taught how to monitor the chatter on social networks on issues in their areas and connect with key sources (Hermida, 2010c).

By and large, journalists have been adopting social media tools like Twitter on their terms. In his analysis of how prominent news outlets such as the BBC, the *Guardian* and the *New York Times* were using social media, Newman concludes:

> So far at least, the use of new tools has not led to any fundamental rewrite of the rule book – just a few tweaks round the edges. As with so many aspects of the Internet, social media are providing a useful extra layer of functionality, enabling stories to be told in new ways, not changing the heart of what journalists do. "Same values, new tools", sums up the core thinking in most newsrooms.
>
> (Newman, 2009: 39)

However, there are indications that decades old norms and practices are bending as social media plays an increasingly prominent role in journalism.

New roles, new rules

The use of social media by journalists raises questions about key tenets of the profession. Journalism is built on the basis of verify first, then publish. In their seminal 2001 work *The Elements of Journalism*, Kovach and Rosenstiel state, "the essence of journalism is a discipline of verification" (71). Through the discipline of verification, the journalist establishes jurisdiction over the ability to objectively parse reality to claim a special kind of authority and status. However, the emergence of Twitter as a source for breaking news, and the speed at which information is disseminated on the network, is challenging the "verify first, then publish" premise of journalism.

One of the early examples of these tensions came in November 2008 when gunmen carried out a series of coordinated attacks in Mumbai. The BBC adopted a collaborative style of newsgathering that combined reports from its own correspondents with contributions from ordinary citizens. The venerable news organization published unverified tweets on its news website as part of its 24-hour rolling news coverage of the bombings (BBC News, 2008). The decision to publish unsubstantiated, and at least in one case, false, information circulating on Twitter was heavily criticized. While acknowledging the need to check tweets for authenticity, BBC News website Editor Steve Herrmann argued "there is a case also for simply monitoring, selecting and passing on the information we are getting as quickly as we can, on the basis that many people will want to know what we know and what we are still finding out" (Herrmann, 2008).

The use of social media content by mainstream media came to the fore a year later during the Iranian election protests of June 2009. With severe reporting restrictions on foreign correspondents on the ground in Tehran, newsrooms turned to social media

to fill the news vacuum. Leading news organisations, from the *New York Times* in the US to the *Guardian* newspaper in the UK, published constantly updated accounts that relied on unverified videos and Twitter messages, complemented with reports from their journalists in Tehran (Stelter, 2009). Since then, the blend of professional and amateur content has become a feature of how breaking news is reported.

News organisations are in the process of figuring out how to marry established practices with the notion of "publish first, verify later", given fears that it may erode public trust in the media. There are signals of a shift in the standards of verification applied in the real-time coverage of ongoing, fast-moving events. The discussions at a BBC social media conference in May 2011 suggested that there is "a view within the mainstream media that audiences have lower expectations of accuracy and verification from journalists' and media outlets' social media accounts than they do of 'appointment TV' or the printed page" (Posetti 2011).

Research by Italian journalist Nicola Bruno into the rolling news coverage of the 2010 Haiti earthquake by three major news outlets found that only the BBC consistently sought to verify information on social media before publication (Bruno, 2011). The two other organizations, the *Guardian* and CNN, chose speed versus verification, at least some of the time. As a consequence, the BBC used less content from social media than other outlets that chose to "tweet first, verify later."

One technique adopted by news organisations is to differentiate between material produced by its journalists and content drawn from social media. The publication of unverified material has tended to take place within live blogs, a commonly used online story-telling format that is distinct from more traditional journalism. Matthew Weaver at the *Guardian* suggested that audiences have a different set of expectations from a live blog compared to an article authored by a correspondent. "On a live blog you are letting the reader in on what's up there, and say: look, we're letting you in on the process of newsgathering. There's a more fluid sense of what's happening" (quoted in Bruno, 2011: 44).

The integration of social media content into the newsgathering process is giving rise to an emerging role of the journalist as curator. Their primary role is to navigate, sift, select and contextualise the vast amounts of data on social awareness streams such as Twitter. The most well-known example of the journalist as curator is Andy Carvin, a social media strategist at NPR in the US. He rose to prominence during the uprisings in Tunisia in December 2010 and Egypt at the start of 2011 when he turned to Twitter to find and reach out to credible sources, carry out real-time fact-checking and aggregate news as it happened.

Carvin's Twitter stream has been described as "a living, breathing real-time verification system" (Silverman, 2011). The verification process, though, differs from standard journalistic practice, as it takes place in the open on Twitter. In his messages, Carvin would regularly turn his online social network to verify or confirm a piece of information, a process he himself described as an "open newsgathering operation" (quoted in Farhi, 2011). In the role of journalist as curator, the media professional lays bare the manner through which a news story is constructed, as fragments of information are reported, contested, denied or verified. Journalism is transformed

from a final product presented to the audience as a definitive rendering of events to a tentative process where contested accounts are examined and evaluated in real-time. In commenting on Carvin's work, the head of NPR's digital media division, Kinsey Wilson, make this distinction clear, stating "it's not positioned as the definitive sort of piece that you might hear on NPR. It's a different form" (quoted in Farhi, 2011).

This different form of journalism on social media is also challenging another key tenet in journalism: objectivity. Journalists are expected to keep their personal opinions out of their reporting (Kovach and Rosenstiel, 2001), yet new media formats such as blogs have enabled the personality of the author to be more visible (Singer, 2005; Domingo and Heinonen, 2008; Hermida, 2009). Social awareness streams can exacerbate the tensions between professional and personal behaviour for a number of reasons. Accounts can be set up in both the name of a news organization and an individual journalist. The messaging activity takes places on a platform beyond the framework of a news organization's website.

There is also an ethos on Twitter and similar platforms of life sharing, with users expected to discuss personal aspects of their lives. "In an emerging communication space like Twitter, which can be used for everything from breaking news to banality, journalists have far greater license to write about whatever strikes their fancy, including the mundane details of their day-to-day activities" (Lasorsa et al., 2011: 6). The extent to which social media is chipping away at the divide between the personal and professional in journalism is unclear. Lasorsa et al. found that US journalists deviated from traditional expectations of objectivity by offering opinions in their tweets. They conclude:

> J-tweeters appear both to be adopting features of Twitter in their micro-blogging and adapting these features to their existing norms and practices. Specifically, much like other Twitter users, j-tweeters are offering opinions quite freely in their microblogs, which deviates from their traditional professional conventions.
>
> (2011: 12)

The journalists also talked about their personal lives on Twitter, but significantly, they were less likely to take part in a conversation with the audience. Other studies suggest that engaging in an exchange with readers on social media is not part of the journalist's toolkit (Garcia de Torres et al., 2011). Attitudes and practices to contend with the blurring of the personal and professional on social media are evolving. Newsrooms have drawn up specific editorial policies out of concerns about trust and credibility to aid journalists in negotiating their interactions on social media. The introduction to guidelines issued by the American Society of News Editors (ASNE) reflects the tensions:

> Putting in place overly draconian rules discourages creativity and innovation, but allowing an uncontrolled free-for all opens the floodgates to problems and leaves news organizations responsible for irresponsible employees.
>
> (Hohmann, 2011).

Conclusion

A degree of hyperbole tends to accompany new technologies and Twitter is no exception. The social media platform itself may be "the app du jour that will fade from the limelight, or it could become a staple of daily life," (Arceneaux and Schmitz Weiss, 2011: 1263). Communication services are subject to shifting social and cultural habits. It is important to consider the affordances of a technology that provides for real-time diffusion of short bursts of data from individuals and institutions in a highly connected and public social space.

Twitter is part of an array of Web 2.0 technologies that are enabling forms of interpersonal communication online that have an impact on how citizens gain the news and information they require to be free and self-governing, transforming how journalists and audiences relate to the news. Even skeptical voices such as *New York Times* executive editor Bill Keller concede "Twitter is a brilliant device – a megaphone for promotion, a seine for information, a helpful organizing tool for everything from dog-lover meet-ups to revolutions" (2011). There is growing research into understanding of how traditional functions of journalism – informing citizens, holding the powerful to account, providing analysis and mobilizing public opinion – are being transformed.

The changes impact how the news is reported and distributed, together with who is doing the reporting. Social awareness streams such as Twitter present the ultimate unbundling of the news into its individual components, where the journalism itself becomes fragmented, omnipresent and ambient. Contradictory reports, rumors, speculation, confirmation and verification circulate via social interaction in a compressed news cycle on digital networked platforms, laying bare the processes of journalism.

Twitter is affecting how news organisations respond to breaking news, how journalists go about their reporting and whose voices are heard. New journalistic genres are emerging as news outlets incorporate social media services into daily routines. A process of negotiation is taking place, as traditional ways of working bump up against social, cultural and technological practices that disrupt established journalistic norms. The role of the journalist has evolved, and continues to evolve, as a vital node in a networked media environment that is trusted to authenticate, interpret and contextualise information flows on social awareness streams.

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